200000089

## THIE UNIVERD STRAYES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# Asgrow Seed Company TTC

THE COURSE THERE HAS BEEN PRESENTED TO THE

## Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC PLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE UT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR USING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE URROSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'AG4402'

In Destinant Mexicology I have hereunto set my hand and caused the seal of the Hunt Unviety Acotection Office to be affixed at the City of Washington, D.C. this twenty-fourth day of April, in the year of our Lord two thousand one.

alunk too

Acting Commissioner Plant Varicty Protection Office Agricultural Marketing Service gry of Agriculture

## U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following state ments are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

(See reverse for instructions and information collection burden statement

Ames IA 50010    1 Five Owners Name of Story and Story a	Asgrow Seed Company	LLC			2 TEMPORARY DESIGNATION OR EXPERIMENTAL NAME AGB45702	3 VARIETY NAME. AG4402
634 East Lincoln Way Ames IA 50010  6 FAX include area code; 515-956-6905  TILING DATE  7 F THE OWNER NAMED IS NOT A TERSON* CIVE FORM OF ORGANIZATION AND COMPORTATED, GIVE ORGANIZATION DEPOSITION  10 NAME AND ADDRESS OF DIVINER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION, If FIX APPLICATION, IT FIX AP	4 ADDRESS (Street and No. or R F D. No., City, State, and ZIP Code, and Country)				5 TELEPHONE (include area code)	FOR OFFICIAL USE ONLY
STATE OWNER NAMED IS NOT A "PERSON". GIVE FORM OF ORGANIZATION (COOPERATION, partnership, association, etc.)   STATE OF RECORPORATION   Delaware   Name And Address of Company LLC   STATE OF RECORPORATION   Delaware   Name And Address of Company LLC   STATE OF RECORPORATION   Delaware   Name And Address of Company LLC   STATE OF RECORPORATION   Delaware   Name And Address of Company LLC   STATE OF RECORPORATION   Delaware   STATE OF RECORPORATION   March 22, 1968   Delaware   STATE OF RECORPORATION   Delaware   Delaware   STATE OF RECORPORATION   Delaware   STATE		•			515-232-7170	
STATE OF RECORDERATION  Delaware  March 22, 1968  March 22, 1968  Delaware  March 22, 1968  Delaware  March 22, 1968  Delaware  Donald Steffen Asgrow Seed Company LLC 634 East Lincoln Way Ames 1A 50010  12 FAX (Include area code) 515–956–3002  13 E.MAIL 11 TELEPHONE (Include area code) 515–956–3002  14 FAX (Include area code) 515–956–3002  15 GENIS AND SPECIES NAME OF CROP Glycine max  Leguminosae  16 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow nonrections on reverses)  18 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow nonrections on reverses)  S Exhibit A. Origin and Steeding Nistory of the Variety  S Exhibit D. Additional Description of the Variety (Optional)  G Exhibit D. Statement of the Base of the Owner's Ownership  Washer Sample (£ 500) visible unrected aceds up, for floor propagation visibles  D Exhibit D. Additional Description of the Variety (Optional)  O TELEPHONE (Include and discount of the Company of the Variety Company of the Vari						FILING DATE
Delaware March 22, 1968    Donald Steffen	7 IF THE OWNER NAMED IS NOT A "PERSON ORGANIZATION (corporation, partnership, as	r, GIVE FORM OF	8 IF INCORPORATE STATE OF INCOR	ED, GIVE	9 DATE OF INCORPORATION	12/9/1799
Donald Steffen Asgrow Seed Company LLC 634 East Lincoln Way Ames IA 50010  11 TELEPHONE (Include area code) 515–956–3002  12 FAX (Include area code) 515–956–3002  13 E.MAIL 14 CROP KIND (Common M 515–956–3002  15 GENIS AND SPECIES NAME OF CROP 15 FAMILY NAME (Botanical) 16 CRICK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow wastuctions on continued and account of the Common M 18 CRICK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow wastuctions on continued and account of the Common M 19 DOES THE OWNER SPECIETY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL C. Objective Box Operations of Variety 19 Eshaba 8. Statement of Distincanes 10 Eshaba 8. Origin and Breeding History of the Variety 10 Eshaba 8. Statement of Distincanes 10 Eshaba 8. Origin and Breeding History of the Variety 11 Eshab 9. Original Breeding History of the Variety 12 Eshaba 9. Original Breeding History of the Variety 13 Eshaba 8. Statement of the Basis of the Owner's Ownership 14 Eshaba 9. Original Breeding History of the Variety 15 Eshaba 9. Original Breeding History of the Variety 16 Eshaba 19 Statement of the Basis of the Owner's Ownership 17 Eshaba 19 Statement of the Basis of the Owner's Ownership 18 Eshaba 19 Statement of the Basis of the Owner's Ownership 19 YES OF PER OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SHAPP OF THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS CRITICAL SHAPP OF THE OWNER SPECIFY THAT SHAPP OF THE OWNER S	Corporation		ļ		March 22, 1968	
515-956-6905  515-956-6905  515-956-6905  516. FAMILY NAME (Bolanical)  15. GENUS AND SPECIES NAME OF CROP  Glycine max  16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow Instructions on reverse)  17. IS THE VARIETY A FIRST HYBRID?  18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow Instructions on reverse)  19. DOES THE OWNER SPECIE'Y THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED? See Section \$3.01 the Plant Vaniety Protection And CERTIFIED SEED?  19. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED? See Section \$3.01 the Plant Vaniety Protection And CERTIFIED SEED?  19. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED?  19. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED?  19. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED?  19. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED?  20. DOES THE OWNER SPECIEY THAT SEED OF THIS VARIETY BE SOLD AS CERTIFIED SEED?  21. FYES TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREIT PROVIDED IN THE VARIETY MADE PRODUCED BEYOND BREIT SEED OF THIS VARIETY BE CHARTED TO THE VARIETY FOR ANY COMPONENT OF THE VARIETY PROTECTED IN THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED IN PROPERTY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGHT OR PATENTY)?  19. THE VARIETY RIGHT (PLANT BREEDEN'S RIGH	Donald Steffen Asgrow Seed Company 1 634 East Lincoln Way	LLC	THIS APPLICATION (First)	Person Asted will rec	Cerve all papers)	F 0.450 00
Exhibit B. Statement of Distinctness  Exhibit C. Objective Description of Variety  Description of the Variety (Optionis)  Exhibit C. Objective Description of the Variety (Optionis)  Exhibit D. Additional Description of the Variety (Optionis)  Exhibit B. Statement of the Basis of the Owner's Ownership  Voucher Sample (2,500 viable unrested seeds or, for tuber propagated varieties, verification fiftal Issue culture will be deposited and maintained in an approved public repository)  Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Vaniety Protection Office)  22. MIS THE VARIETY (INCLUDING ANY MARVESTED MATERIAL) OR A HYBRID PRODUCED OTHER COUNTRIES?  TYES  NO  If YES  NO  If YES  NO  If YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, Disposition, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)  The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the cardicale.  SIGNATURE OF OWNER  SIGNATURE OF OWNER  SIGNATURE OF OWNER	15 GENUS AND SPECIES NAME OF CROP Glycine max  18 CHECK APPROPRIATE BOX FOR EACH AT (everse)	TTACHMENT SUBMITTED (Fo	16. FAM	BLY NAME (Botanic BUMI DOSAE 19. DOES THE ( CERTIFIED	DWNER SPECIFY THAT SEED OF THIS SEED? See Section 63(a) of the Pic	IS THE VARIETY A FIRST GENERATION IYBRID?  YES D NO.  S VARIETY BE SOLD AS A CLASS OF
States* (Mail to the Plant Variety Protection Office)  22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?    YES	c.	of the Variety (Optional) of the Variety (Optional) of the Owner's Ownership	agaled variebes, n an approved public	20. DOES THE OF GENERAL	and 21 below)  OWNER SPECIFY THAT SEED OF THE ATIONS? YES	S VARIETY BE LIMITED AS TO NUMBER
PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?    YES	g. Filing and Examination Fee (\$2.4) States" (Mail to the Plant Variety i	50), made psymble to "Treasure Protection Office)	er of the United		FOUNDATION  REGISTERE	CERTIFIED
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES, (Please use space indicated on reverse.)  IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND A REFERENCE NUMBER. (Please use space indicated on reverse.)  24 The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be for a tuber propagated owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.  SIGNATURE OF OWNER  SIGNATURE OF OWNER	PROM THIS VARIETY BEEN SOLD, DISPO	VESTED MATERIAL) OR A IN SED OF, TRANSFERRED, OR	BRID PRODUCED USED IN THE U.S. OR	23. IS THE VAR PROPERTY	RETY OR ANY COMPONENT OF THE ' RIGHT (PLANT BREEDER'S RIGHT O	VARIETY PROTECTED BY INTELLECTUA IR PATENTI?
The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be for a tuber propagated variety a bissue culture will be deposited in a public repository and maintained for the duration of the certificate.  The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.  SIGNATURE OF OWNER  SIGNATURE OF OWNER	IF YES. YOU MUST PROVIDE THE DATE	OF FIRST SALE DISPOSITIO	N, TRANSFER, OR USE	IF YES, PLE	ASE GIVE COUNTRY, DATE OF FILIN	G OR ISSUANCE AND ASSIGNED
	The undersigned owner(s) is(are) the owner and is entitled to protection under the provision of the provisio	of this sexually reproduced or cons of Section 42 of the Plant	tuber propagated plant vari Variety Protection Act.	and will be replenish for the duration of the lety, and believe(s)	hed upon request in accordance with su he certificate. that the variety is new, distinct, uniform,	ch regulations as may be applicable, or
NAME (Please print or type)  NAME (Please print or type)				1		
Donald Steffen	NAME (Flease print or type)			NAME (Please)	print or type)	

S&T-470 (6-98) designed by the Plant Vanety Protection Office with WordPerfect 6.0a Replaces STD-470 (03-96) which is obsolete

### **EXHIBIT A**

### ORIGIN AND BREEDING HISTORY OF AG4402

- 1992 Cross RP931206B94-21822 was made near Isabela, Puerto Rico. Parentage: A4539\*A4341\*A4138\*40-3-2
- 1993-4 F1 & F2 generations were grown near Isabela, Puerto Rico and advanced using modified pedigree selection.
- 1995 F3 Bulk Populations were grown near Isabela, Puerto Rico and single plants pulled.
- 1995-6 F3 derived F4 plants were grown in Ridgeway, Indiana in progeny rows, and row RP931206B94-21822 was selected based on agronomic characteristics.
- F3:5 RP931206B94-21822 was entered in a yield test at 3 locations in the upper Midwest, where it placed 3<sup>rd</sup> of 50 entries.
- F3:6 RP931206B94-21822 was entered in a yield test at 9 locations in the upper Midwest, where it placed 1<sup>st</sup> of 40 entries.

AG4402 is uniform and stable within commercially acceptable limits based on trial observations since 1996. As with any other soybean variety, variants can occur for almost any characteristic during the course of repeated sexual reproduction.

## **EXHIBIT B**

## Novelty Statement Concerning AG4402 Soybean

To our knowledge, the soybean varieties that closely resemble AG4402 are A4539, AG4501, and A4604:

1. Flower color	AG4402 A4539 AG4501 A4604	<ul><li>Purple</li><li>White</li><li>Purple</li><li>Purple</li></ul>
2. RR <sup>TM</sup> gene (Tolerance to glyphosate herbicide)	AG4402 A4539 AG4501 A4604	<ul><li>Present</li><li>Absent</li><li>Present</li><li>Absent</li></ul>
3. Pubescence color	AG4402 A4539 AG4501 A4604	- Tawny - Gray - Tawny - Tawny
PRR gene     (Tolerance to Phytophthora Root Rot)	AG4402 A4539 AG4501 A4604	- Rps1k - rps - rps - rps
<ol> <li>STS™ gene         (Resistance to sulfonylurea herbicides)</li> </ol>	AG4402 A4539 AG4501 A4604	<ul><li>Absent</li><li>Absent</li><li>Present</li><li>Present</li></ul>

REPRODUCE LOCALLY. Include form number and date on all reproductions

200000089 Form Approved: OMB NO. 0581-005

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is extimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Venter at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C (Soybean

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF	APPLICANT(S)		<u> </u>		FOR OFFICIAL USE ONL	v	
	. ,				PVPO NUMBER	<u> </u>	
Asgro	w Seed Com	pany LLC			1 VIO NOMBER		
ADDRESS	(Street and No., or R.F.)	D. No., City, State, and	Zip Code)		VARIETY NAME		
			•			AG4402	
	st Lincoln Way				TEMPORARY DESIGNATION	ON	
Ames	IA 50010					AGB45702	
PLEASE RE	EAD ALL INSTRUCT	TIONS CAREFULL	Y: Place the appropri	ate number that desc	ribes the varietal character of this variety in		
a zero in the minimum of	first box (e.g. $\Box\Box$	or $\square \square$ ) when a rative data should be	number is either 99 o determined from va	r less 9 or less respe vrictics entered in th	ctively. Data for quantitative plant characters are trial. Royal Horticultural Society	ers should be based on	
Please answ	er all questions for y	our variety, lack of	response may delay	progress of your ap	plication.		
A. MOR	RPHOLOGY						
g 1.01							
Seed Shap	-	Challe and a cl			w. war		
2	1 = Spherical (L/W, L/T, and T/W ratios - <1.2)		2 = Spherical Flattened (L/W ratio >1.2; L/T ratio = <1.2)				
		w, L/1, and 1/w Elongate	ratios - <1.2)		•		
	(L/T ratio $> 1.2$ ; T/W = $<1.2$ )			4 = Elongate-Flattened (L/T ratio >1.2; T/W >1.2)			
Seed Coat	-		-1.2)	(L) x Tatlo >	1.2, 1/11 - 1.2)	•	
	1= Yellow	2= Green	3= Brown	4= Black	5 O4hou		
1	1 I CHOW	2- Gleen	3— DIOWH	4- Black	5= Other ( <i>Please Specify</i> )		
Seed Coat	T netore				(Treuse Specgy)		
		<b>4</b> C1.					
1	1= Dull	2= Shiny					
Seed Size:	:						
1 8	grams/100 s	eeds					
Hilum Col	lor:						
6	1= Buff	2= Yellow	3= Brown	4= Gray	5= Imperfect Black		
	6= Black	7= Other (Pla		·			
Cotyledon		(	<u>F</u> 37/		<del></del>		
1	1 = Yellow	2 = Green					

A. MOM HOLOGI Commueu	A.	<b>MORPHOLOGY</b>	Continued
-----------------------	----	-------------------	-----------

**Seed Protein Peroxidase Activity:** 

1 = Low

2 = High

**Hypocotyl Color:** 

1 = Green

2 = Green with Bronze 3 = Light Purple Evans' or 'Davis' Bands below Cotyledon below Cotyledons

Woodworth'or'Tracy' 'Beeson'or'Pickett71' 4 = Dark Purpleextending to unifoliate leaves (Hodgson', 'Coker', or'Hampton266A')

Leaf Shape:

1 = Lanceolate 2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1

1 = White

2 = Purple

3 = White with a Purple Throat

**Pod Color:** 

1

1 = Tan

2 = Brown

3 = Black

**Pubescence Color:** 

2

1 = Gray

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

3

1= Determinate 2= Semi-Determinate

3= Indeterminate

4 = Intermediate

**B. DISEASE REACTIONS** 

0 = Not Tested 1 = Susceptible 2 = Resistant3 = Tolerant

**Bacterial** 

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye &Wilkie)

Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye &Wilkie)

Fungal

Brown Spot (Septoria glycines Hemmi)

Frogeye Leafspot (Cercospora sojina)

race 1

race 2

race 3

race 4

race 5

0

race 6

Other (Please Specify)

Target Spot (Corynespora cassiicola (Berk. & Curt.) Wei)

Downy Mildew (Peronospora trifoliorum var. manshurica (Naum.) Syd. Ex Gaum)

D, D	IODAGE REA	CITOMS Commuea)	b = Not rested r = Susceptible	2 = Resistant $3 = 1$	olerant	
0	Powder	y Mildew ( <i>Microsphaera difj</i>	fusa Cke. & Pk.)			
0	Brown	Stem Rot ( <i>Phialophora grego</i>	ata (Allington & Chamberlain) W	. Gams.)		
0	Stem C	anker ( <i>Diaporthe phaseoloru</i>	m (Cke. & Ell.)Sacc. var. caulivoi	a Athow & Caldwell)		
0	Pod and	l Stem Blight ( <i>Diaporthe pha</i>	seolorum (Cke. & Ell.)Sacc. var.	s <i>ojae</i> (Lehman) Wehm	ı.)	
0	Purple !	Seed Stain ( <i>Cercospora kikud</i>	chü (T. Matsu. & Tomoyasu) Garo	lener)		
0	Rhizoct	onia Root rot ( <i>Rhizoctonia se</i>	olani Kuhn)			
Phytop	hthora Rot ( <i>Phy</i>	tophthora megasperma Drec	hs. f. sp. <i>glycinea</i> (Kuan & Erwin)	)		
2	race 1	2 race 8	2 race 15	2	race 22	
2	race 2	2 race 9	1 race 16	1	race 23	
2	race 3	2 race 10	2 race 17	2	race 24	
2	race 4	2 race 11	2 race 18	1	race 25	
2	race 5	1 race 12	1 race 19	0	race 26	
2	race 6	2 race 13	1 race 20	0	race 27	
2	race 7	2 race 14	1 race 21	L	Other ( <i>Please</i> Specify)	
0	Bud Blig	tht ( Tobacco Ringspot Virus	8)			
0	Yellow M	Aosaic ( Bean Yellow Mosaic	e Virus)			
0	Cowpea	Mosaic (Cowpea Chlorotic V	Virus)			
0	Pod Mot	tle ( Bean Pod Mottle Virus)	ı			
0	Seed Mo	ttle ( Soybean Mosaic Virus)	)			
Nemato	ode					
Soybean	Cyst Nematode	(Heterodera glycines Ichino	he)			
0	race 1	2 race 3	0 race 6	2 r	race 14 (former r. 4)	
0	race 2	0 race 5	0 race 9		Other ( <i>Please</i>	
0	Lance Ne	ematode ( <i>Hoplolaimus colon</i>	abus Sher)		Specify)	
0						
0		Root Knot Nematode (Mele		,,		

200000089 **DISEASE REACTIONS Continued)** 0 = Not Tested 1 = Susceptible 2 = Resistant3 = Tolerant Peanut Root Knot Nematode (Meloidogyne arenaria (Neal) Chitwood) Reniform Nematode (Rotylenchulus reniformis Linwood & Olivera) Javanese Nematode (Meloidogyne javanica (Treud) Chitwood) Other Nematode (Please Specify) C. PHYSIOLOGICAL RESPONSES 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Tolerant 0 Iron Chlorosis on Calcareous Soil **Phosphorus** Boron Aluminum Salt Drought Other (Please Specify) D. INSECT REACTIONS 0 = Not Tested 1 = Susceptible 2 = Resistant3 = Tolerant Mexican Bean Beetle (Epilachna varivestis Mulsant) Potato Leaf Hopper (Empoasca fabae (Harris)) Other (Please Specify) E. HERBICIDE REACTIONS 0 = Not Tested 1 = Susceptible 2 = ResistantMetribuzin 0 **Bentazone** Sulfonylurea **Glyphosate** Glufosinate **Pendimethalin** Other (*Please Specify*)

F. TRANSGENIC COMPOSITION

Has the development of the Subject Variety included the insertion or removal of genetic material?

Yes

No

If yes, please complete the following information equests\*. Use additional pages if necessary.

## F. TRANSGENIC COMPOSITION(Continued)

- 1. Please state the vector's name:
- 2. Please state the vector components:
- 3. Please describe the genetic material successfully transferred into the Subject Variety:
- 4. Please describe the insertion protocol:
- \* A literature citation(s) explaining the four information requests above may be an acceptable alternative to completion of the "Transgenic Composition" portion of this form.

### G. BIOCHEMICAL MARKERS

Please describe any biochemical information here which you believe will be helpful in further describing the Subject Variety (e.g. Sim Sequence Repeats, Random Fragment LengthPolymorphisms, Isozymic Characterization). Use additional pages if necessary.

## H. COMMENTS

## **EXHIBIT D**

## Additional Description of AG4402 Soybean

AG4402 is a mid maturity group IV variety with resistance to Roundup <sup>tm</sup> herbicide. It has very high yield potential. It has superior yields to lines of similar maturity and has excellent agronomic characteristics, including good lodging resistance. In tests, it has beat Asgrow A4341 by 103 % overall, winning at 6 of 9 locations. It has a major gene for Phytophthora resistance, Rps1k, conferring resistance to most races of Phytophthora Root Rot. AG4402 would be grown in the mid Group IV growing areas of the corn belt, including Illinois, Indiana, and Missouri. It has only average appearance.

## **EXHIBIT E**

## Statement of Basis of Applicant Ownership

AG4402 was originated and developed by Mr. Mark Buettner, an Asgrow soybean breeder. By agreement with Asgrow Seed Company LLC, all rights to any invention, discovery or development made by employees are assigned to the company. No rights of such invention, discovery or development are returned to the employee.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paperwo	n accordance with the Privacy Act of rk Reduction Act (PRA) of 1995.
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to de certificate is to be issued (7 U.S.C. 2 until certificate is issued (7 U.S.C. 2426	421). Information is held confidential
1. NAME OF APPLICANT(S)	TEMPORARY DESIGNATION     OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Asgrow Seed Company LLC	AGB45702W	AG4402
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
634 E. Lincoln Way Ames IA 50010	515-232-7170	515-232-6905
Alles IA SUUTU	7. PVPO NUMBER 200000	089
8. Does the applicant own all rights to the variety? Mark an "X" in appropri		(X) YES   NO
Is the applicant (individual or company) a U.S. national or U.S. based company	ompany?	(X) YES   NO
If no, give name of country  10. Is the applicant the original owner?	IO If no planta antwar and of the f	- Hawine
10. Is the applicant the original owner? XX YES	() If no, please answer one of the fo	oll <b>owing:</b>
a. If original rights to variety were owned by individual(s), is (are) the or	iginal owner(s) a U.S. national(s)?	•
` YES N	O If no, give name of country	
b. If original rights to variety were owned by a company(ies), is(are) the	original owner(s) a U.S. based company	?
TYES N	O If no, give name of country	
11. Additional explanation on ownership (if needed, use reverse for extra sp	pace):	
es u	Ç3 — Ç4	
PLEASE NOTE:		

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to compete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions. searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, resigion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.